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**FINAL REPORT
SEPTEMBER 1989**

EVT 35-89

**TRANSPORTABILITY TEST
OF THE
CNU-180B/E CONTAINERS
IN AN
ISO SIDE-OPENING CONTAINER**

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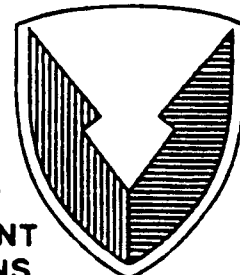
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Prepared for:

U.S. Army Defense Ammunition
Center and School
ATTN: SMCAC-DEO
Savanna, IL 61074-9639

91-01124



**US ARMY
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CHEMICAL COMMAND**

**US ARMY DEFENSE AMMUNITION
CENTER AND SCHOOL**

**EVALUATION DIVISION
SAVANNA, ILLINOIS 61074-9639**

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REPORT DOCUMENTATION PAGE

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<p>The U.S. Army Defense Ammunition Center and School (USADACS), Evaluation Division (SMCAC-DEV), was tasked by the Storage and Outloading Division (SMCAC-DEO) to test a blocking and bracing procedure for the CNU-180B/E containers in an Air Force International Standards Organization (ISO) side-opening container. The tests conducted on this shipping configuration were: Rail Impact Test, Hazard Course, Road Trip, Washboard Course, and Shipboard Transportation Simulator (STS). These tests resulted in an acceptable outloading procedure for this shipping configuration. Test results are contained in this report.</p>					
20. DISTRIBUTION/AVAILABILITY OF ABSTRACT <input checked="" type="checkbox"/> UNCLASSIFIED/UNLIMITED <input type="checkbox"/> SAME AS RPT. <input type="checkbox"/> DTIC USERS			21. ABSTRACT SECURITY CLASSIFICATION UNCLASSIFIED		
22a. NAME OF RESPONSIBLE INDIVIDUAL THOMAS J. MICHELS, Chief, Evaluation Division			22b. TELEPHONE (Include Area Code) 815-273-8928		22c. OFFICE SYMBOL SMCAC-DEV

U.S. ARMY DEFENSE AMMUNITION CENTER AND SCHOOL
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REPORT NO. EVT 35-89

TRANSPORTABILITY TEST OF THE
CNU-180B/E CONTAINERS IN AN ISO SIDE-OPENING CONTAINER

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PART 1

INTRODUCTION

A. BACKGROUND. The U.S. Army Defense Ammunition Center and School (USADACS), Evaluation Division (SMCAC-DEV), was tasked by the Storage and Outloading Division (SMCAC-DEO) to test a blocking and bracing procedure for the CNU-180B/E containers in an Air Force ISO side-opening container. The tests conducted on this shipping configuration were Rail Impact Test, Hazard Course, Road Trip, Washboard Course, and STS.

B. AUTHORITY. This test was conducted in accordance with mission responsibilities delegated by the U.S. Army Armament, Munitions and Chemical Command (AMCCOM), Rock Island, IL 61299-6000. Reference is made to Change 4, 4 October 1974, to AR 740-1, 23 April 1971, Storage and Supply Operations; AMCCOMR 10-17, 13 January 1986, Mission and Major Functions of U.S. Army Defense Ammunition Center and School.

C. OBJECTIVE. The objective of these tests was to determine if the outloading procedures developed for the CNU-180B/E containers provided suitable protection in a road, rail, and ship transportation environment. The tests performed on the CNU-180B/E shipping configuration were: Rail Impact Test, Hazard Course, Road Trip, Washboard Course, and STS.

D. CONCLUSIONS. The tested configuration passed the rail, road (hazard, trip, and washboard), and STS tests.

E. RECOMMENDATION. It is recommended that the outloading procedures be adopted for shipping the CNU-180B/E containers in an ISO side-opening container by rail, road, and ship.

PART 2

ATTENDEES

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PART 3

TEST PROCEDURES

A. RAIL IMPACT TEST. The test load or vehicle should be positioned in/on a railcar. For containers, the loaded container shall be positioned on a container chassis and securely locked in place using the twist locks at each corner. The container chassis shall be secured to a railcar. Equipment needed to perform the test includes the specimen (hammer) car, five empty railroad cars connected together to serve as the 250,000-pound anvil, and a railroad locomotive. These anvil cars are positioned on a level section of track with air and hand brakes set and with the draft gear compressed. The locomotive unit pulls the specimen car several hundred yards away from the anvil cars and, then, pushes the specimen car toward the anvil at a predetermined speed, disconnects from the specimen car about 50 yards away from the anvil cars, and allows the specimen car to roll freely along the track until it strikes the anvil. This constitutes an impact. Impacting is accomplished at speeds of 4, 6, and 8 miles per hour (mph) in one direction and at a speed of 8 mph in the opposite direction. The 4 and 6 mph impact speeds are approximate; the 8 mph speed is a minimum. Impact speeds are to be determined by using an electronic counter to measure the time required for the specimen car to traverse an 11-foot distance immediately prior to contact with the anvil cars.

B. HAZARD COURSE. The specimen being tested will be subjected to the road hazard course. Using a suitable truck/tractor or tactical vehicle, the vehicle/specimen of test method no. 1 shall be towed/driven over a hazard course two times at a speed of approximately 5 mph. The speed may be increased or decreased, as appropriate, to produce the most violent load response.

C. ROAD TRIP. Using a suitable truck/tractor or tactical vehicle, the vehicle with the specimen load shall be driven/towed for a total distance of at least 30 miles over a combination of roads surfaced with gravel, concrete, and asphalt. Test route shall include curves, corners, railroad crossings, cattle guards, stops, and starts. The test vehicle shall travel at the maximum speed suitable for the particular road being traversed, except as limited by legal restrictions.

D. WASHBOARD COURSE. Using a suitable truck/tractor, and/or tactical vehicle, the specimen shall be towed/driven over the washboard course at a speed which produces the most violent response in the particular test load (as indicated by the resonant frequency of the suspension system beneath the load).

E. SHIPBOARD TRANSPORTATION SIMULATOR (STS). The test load (specimen) shall be positioned onto the STS and securely locked in place using the cam lock at each corner. Using the procedure detailed in the operating instruction, the STS shall be started oscillating at an amplitude of $30^{\circ} \pm 2^{\circ}$ either side of center and a frequency of 2 cycles per minute (30 seconds plus 2 seconds total roll period). This frequency shall be maintained for at least 15 minutes during which time the load will be observed for apparent defects that could cause a safety hazard. The frequency of oscillation shall then be increased to 4 cycles per minute (15 seconds plus 1-second roll period) and the apparatus operated for 2 hours. If an inspection of the load does not indicate an impending failure, the frequency of oscillation shall be further increased to 5 cycles per minute (12 seconds \pm 1-second cycle time), and the apparatus operated for 4 hours. The operation does not necessarily have to be continuous; however, no change or adjustments to the load or load restraints shall be permitted at any time during the test. After once being set in place, the test load (specimen) shall not be removed from the apparatus until the test has been completed or is terminated.

PART 4
TEST RESULTS

ROAD TEST AND SHIPBOARD TRANSPORTATION SIMULATOR (STS) DATA

TEST NO. 1

DATE: 26 September 1989

TEST SPECIMEN: CNU-180B/E Containers in a Side-Opening ISO Container

PASS 1-A OVER FIRST SERIES OF TIES:	0.11	MIN	5.16	MPH
-------------------------------------	------	-----	------	-----

PASS 1-B OVER SECOND SERIES OF TIES:	0.11	MIN	5.16	MPH
--------------------------------------	------	-----	------	-----

REMARKS: No Damage.

PASS 2-A OVER FIRST SERIES OF TIES:	0.11	MIN	5.16	MPH
-------------------------------------	------	-----	------	-----

PASS 2-B OVER SECOND SERIES OF TIES:	0.11	MIN	5.16	MPH
--------------------------------------	------	-----	------	-----

REMARKS: No internal or external damage. No load shift.

30-MILE ROAD TEST: No damage.

PASS 3-A OVER FIRST SERIES OF TIES:	0.10	SEC	5.68	MPH
-------------------------------------	------	-----	------	-----

PASS 3-B OVER SECOND SERIES OF TIES:	0.10	SEC	5.68	MPH
--------------------------------------	------	-----	------	-----

REMARKS: No external damage.

PASS 4-A OVER FIRST SERIES OF TIES:	0.10	SEC	5.68	MPH
-------------------------------------	------	-----	------	-----

PASS 4-B OVER SECOND SERIES OF TIES:	0.10	SEC	5.68	MPH
--------------------------------------	------	-----	------	-----

REMARKS: No external or internal damage. No load shift. Paint abrasion on side doors from blocking movement.

WASHBOARD COURSE: No damage.

Shipboard Transportation Simulator (STS): No damage or load shifting.

RAIL IMPACT TEST DATA

TEST NO. 2

DATE: 3 October 1989

TEST SPECIMEN: CNU-180B/E Containers in a Side-Opening Container

TEST CAR NO.	TTX 250254	LT. WT.	55,400	POUNDS
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CONTAINER:	USAF 0010582	LT. WT.	6,050	POUNDS
------------	--------------	---------	-------	--------

MILVAN CHASSIS:	5394	LT. WT.	6,100	POUNDS
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LADING AND DUNNAGE		WT.	25,480	POUNDS
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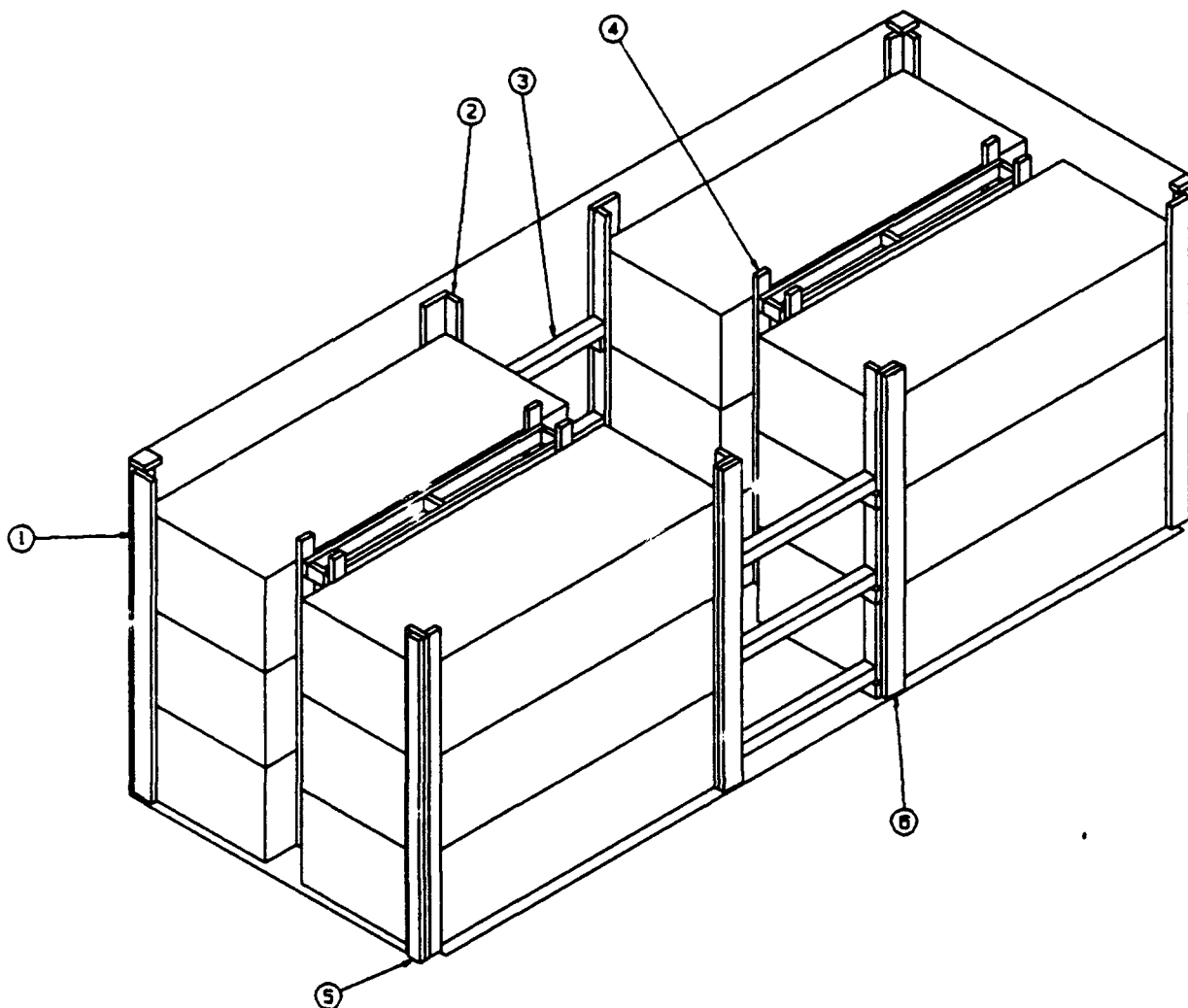
TOTAL SPECIMEN		WT.	93,030	POUNDS
----------------	--	-----	--------	--------

BUFFER CAR (5 CARS)		WT.	250,000	POUNDS
---------------------	--	-----	---------	--------

IMPACT NO.	END STRUCK	VELOCITY (MPH)	REMARKS
1	Rear	4.41	No damage
2	Rear	6.15	No damage
3	Rear	8.03	No damage
4	Forward	8.15	No damage

PART 5

BLOCKING AND BRACING PROCEDURE



ISOMETRIC VIEW

KEY NUMBERS

- ① CORNER ASSEMBLY (4 REQD). SEE THE "CORNER ASSEMBLY" DETAIL ON PAGE 5 AND GENERAL NOTES "F", "G", "H", "J" AND "K" ON PAGE 3.
- ② SIDEWALL CENTER ASSEMBLY (2 REQD, ONE RIGHT HAND AND ONE LEFT HAND). SEE THE "SIDEWALL CENTER ASSEMBLY" DETAIL ON PAGE 5 AND GENERAL NOTES "F", "H", "J" AND "K" ON PAGE 3.
- ③ STRUT, 4" X 4" BY CUT-TO-FIT (REF: 46") (6 REQD). TOENAIL TO PIECES MARKED ② AND ⑥ W/2-10d NAILS AT EACH END. SEE GENERAL NOTES "F", "H", "J" AND "K" ON PAGE 3.
- ④ CENTER FILL ASSEMBLY (2 REQD). SEE THE "CENTER FILL ASSEMBLY" ON PAGE 5 AND GENERAL NOTES "F", "H", "J" AND "K" ON PAGE 3.
- ⑤ CORNER FILL PIECE, 2" X 4" X 7'-0" (2 REQD). NAIL TO CORNER ASSEMBLY W/7-10d NAILS. SEE GENERAL NOTES "G", "H", "J" AND "K" ON PAGE 3.
- ⑥ DOORWALL CENTER ASSEMBLY (2 REQD, ONE RIGHT HAND AND ONE LEFT HAND). SEE THE "DOORWALL CENTER ASSEMBLY" DETAIL ON PAGE 5 AND GENERAL NOTES "F", "H", "J" AND "K" ON PAGE 3.

APPROVED BY
BUREAU OF EXPLOSIVES

"THIS DRAWING IS SUBJECT TO FINAL APPROVAL"

DATE _____

LOADING AND BRACING WITH WOODEN
DUNNAGE IN SIDE OPENING
COMMERCIAL CONTAINER OF CBU 52,
CBU 58, OR CBU 71 IN CNU-126/E,
CNU-180/E OR CNU-180B/E SHIPPING
AND STORAGE CONTAINER

INDEX

<u>ITEM</u>	<u>PAGE(S)</u>
TYPICAL LOADING PROCEDURES - - - - -	2
GENERAL NOTES, AND MATERIAL SPECIFICATIONS - - - - -	3
TYPICAL CONTAINER DETAILS - - - - -	4
GENERAL DETAILS - - - - -	5.6

LOADING AND BRACING SPECIFICATIONS SET FORTH WITHIN THIS DRAWING ARE APPLICABLE TO LOADS THAT ARE TO BE SHIPPED BY TRAILER/CONTAINER-ON-FLAT CAR (T/COFC) RAIL CARRIER SERVICE. THESE SPECIFICATIONS MAY ALSO BE USED FOR LOADS THAT ARE TO BE MOVED BY MOTOR OR WATER CARRIERS. SEE GENERAL NOTE "M" ON PAGE 3.

U.S. ARMY MATERIEL COMMAND DRAWING

APPROVED, U.S. ARMY ARMAMENT, MUNITIONS AND
CHEMICAL COMMAND

DRAFTSMAN

TECHNICIAN

ENGINEER

S. WILSON

G. WILLIS

EVALUATION
DIVISION

STORAGE & OUTLOADING
DIVISION

LOGISTICS
ENGINEERING
OFFICE

APPROVED BY ORDER OF COMMANDING GENERAL, U.S.
ARMY MATERIEL COMMAND

U.S. ARMY DEFENSE AMMUNITION CENTER AND SCHOOL

CLASS

DIVISION

DRAWING

FILE

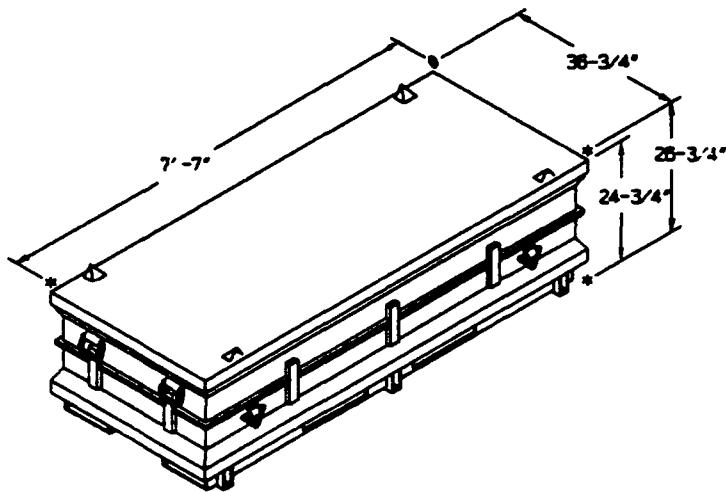
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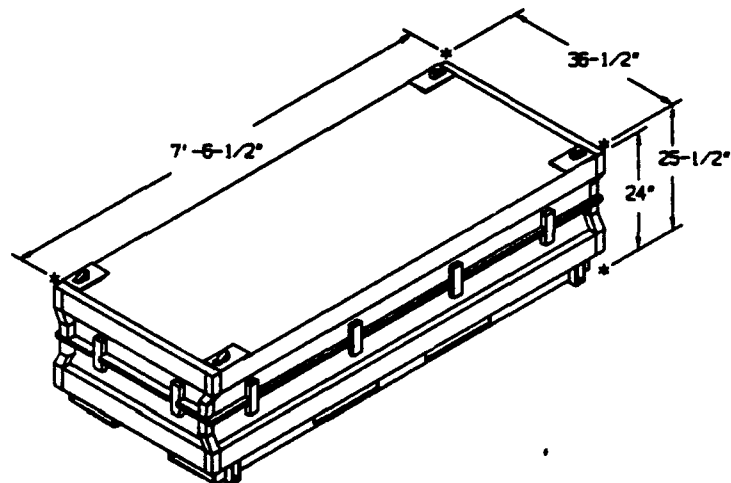
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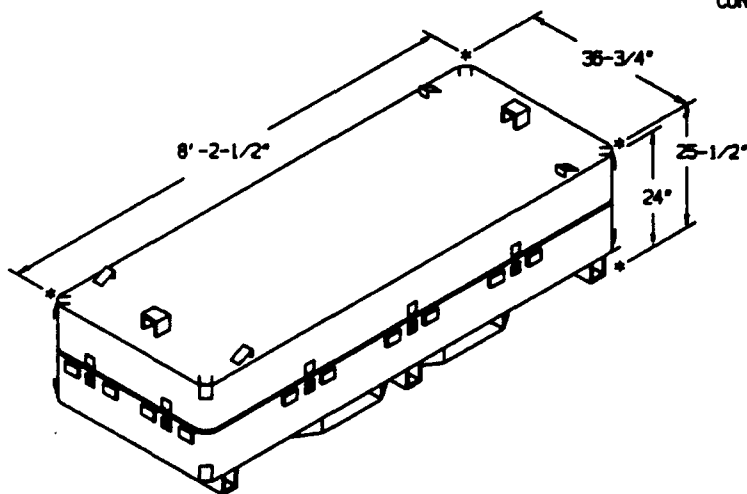
CNU 180/E CONTAINER

CONTAINER WEIGHT
 FOR CBU 58 ----- 2.084 LBS (APPROX)
 FOR CBU 71 ----- 2.064 LBS (APPROX)
 CONTAINER CUBE ----- 47.9 CU FT (APPROX)



CNU 180B/E CONTAINER

CONTAINER WEIGHT
 FOR CBU 58 ----- 2.084 LBS (APPROX)
 FOR CBU 71 ----- 2.064 LBS (APPROX)
 CONTAINER CUBE ----- 45.9 CU FT (APPROX)



CNU 125/E CONTAINER

CONTAINER WEIGHT
 FOR CBU 52 ----- 2.032 LBS (APPROX)
 FOR CBU 58 ----- 2.180 LBS (APPROX)
 CONTAINER CUBE ----- 48.3 CU FT (APPROX)

(GENERAL NOTES CONTINUED)

- K. CAUTION: DO NOT NAIL DUNNAGE MATERIAL TO THE CONTAINER WALLS OR FLOOR. ALL NAILING WILL BE WITHIN THE DUNNAGE.
- L. PORTIONS OF THE CONTAINER DEPICTED WITHIN THIS DRAWING, SUCH AS THE SIDE DOORS, HAVE NOT BEEN SHOWN IN THE LOAD VIEW FOR CLARITY PURPOSES.
- M. REQUIREMENTS CITED WITHIN THE BUREAU OF EXPLOSIVES PAMPHLET 6C APPLY WHEN THE SHIPMENT MOVES BY TRAILER/CONTAINER-ON-FLAT-CAR (T/COFC). SPECIAL T/COFC NOTES FOLLOW:
1. A LOADED CONTAINER MUST BE ON A CHASSIS EQUIPPED WITH TWO 8061E ASSEMBLIES WHEN BEING MOVED IN TOFC SERVICE.
 2. THE LOAD LIMIT OF A T/COFC RAILCAR MUST NOT BE EXCEEDED, NOR WILL A CAR BE LOADED SO THAT THE TRUCK UNDER ONE END OF THE CAR CARRIES MORE THAN ONE-HALF OF THE LOAD LIMIT FOR THAT CAR.
- N. DURING INTERSTATE AND/OR INTERSTATE MOVES BY MOTOR CARRIER, A PROPER CHASSIS OR MODIFIED FLAT BED TRAILER MUST BE USED TO PRECLUDE VIOLATION OF ONE OR MORE "WEIGHT LAWS" APPLICABLE TO THE STATE OR STATES INVOLVED.
- O. CONVERSION TO METRIC EQUIVALENTS: DIMENSIONS WITHIN THIS DOCUMENT ARE EXPRESSED IN INCHES AND WEIGHTS ARE EXPRESSED IN POUNDS. WHEN NECESSARY, THE METRIC EQUIVALENTS MAY BE COMPUTED ON THE BASIS OF ONE INCH EQUALS 25.4MM AND ONE POUND EQUALS 0.454KG.
- P. RECOMMENDED SEQUENTIAL LOADING PROCEDURES:
1. PREFABRICATE FOUR CORNER ASSEMBLIES, TWO SIDEWALL CENTER ASSEMBLIES (ONE RIGHT HAND AND ONE LEFT HAND), TWO CENTER FILL ASSEMBLIES, AND TWO DOORWALL CENTER ASSEMBLIES (ONE RIGHT HAND AND ONE LEFT HAND).
 2. INSTALL TWO CORNER ASSEMBLIES.
 3. LOAD EITHER SIX CNU-180/E, CNU-180B/E OR CNU-126/E CONTAINERS.
 4. INSTALL BOTH SIDEWALL CENTER ASSEMBLIES.
 5. INSTALL BOTH CENTER FILL ASSEMBLIES.
 6. REPEAT STEP 2.
 7. REPEAT STEP 3.
 8. INSTALL BOTH DOORWALL CENTER ASSEMBLIES.
 9. INSTALL STRUTS CUT-TO-FIT.

BILL OF MATERIAL		
LUMBER	LINEAR FEET	BOARD FEET
2" X 3"	4	2
2" X 4"	189	126
2" X 6"	50	50
2" X 8"	14	19
4" X 4"	23	31
NAILS	NO. REQD	POUNDS
10d (3")	264	4

MATERIAL SPECIFICATIONS

LUMBER - - - - : TN 743-200-1 (DUNNAGE LUMBER) AND FED SPEC MM-L-751.

NAILS - - - - : FED SPEC FF-N-105; COMMON.

GENERAL NOTES

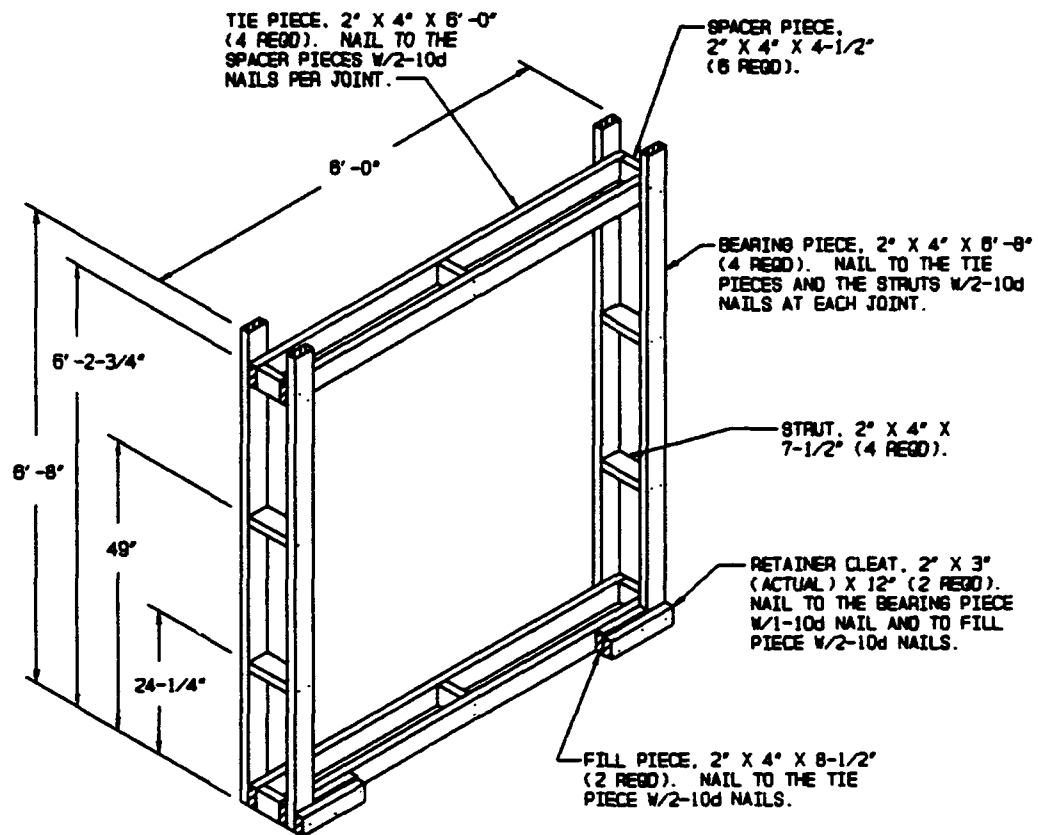
- A. THIS DOCUMENT HAS BEEN PREPARED AND ISSUED IN ACCORDANCE WITH AR 740-1 AND AUGMENTS TM 743-200-1 (CHAPTER 5).
- B. ALL LOADS SHIPPED BY THE PROCEDURES DEPICTED IN THIS DRAWING MUST BE IN ACCORDANCE WITH THE REQUIREMENTS SET FORTH IN TITLE 49, THE UNITED STATES CODE OF FEDERAL REGULATIONS: AR 55-355/APM 75-2; DOD 4500-32-R; DOD 5100.76-M; DOD 8055.9-8TD; AS WELL AS ANY AND ALL OTHER APPLICABLE SERVICE REGULATIONS.
- C. THE SPECIFIED OUTLOADING PROCEDURES ARE APPLICABLE TO THE CBU 52, CBU 58, OR CBU 71 BOMB UNITS PACKED IN A CNU-126/E, CNU-180/E, OR CNU-180B/E SHIPPING AND STORAGE CONTAINER. SUBSEQUENT REFERENCE TO CONTAINER HEREIN MEANS THE CNU-126/E, CNU-180/E, OR CNU-180B/E CONTAINER WITH BOMBS INSTALLED. SEE PAGE 4 FOR DETAILS OF THE CONTAINER. CAUTION: REGARDLESS OF THE QUANTITY OF CONTAINERS TO BE SHIPPED, THE "MAXIMUM GROSS WEIGHT" OF THE SIDE OPENING CONTAINER MUST NOT BE EXCEEDED.
- D. THE OUTLOADING PROCEDURES SPECIFIED HEREIN CAN ALSO BE UTILIZED FOR THE SHIPMENT OF THE DEPICTED CNU-126/E, CBU-180/E, OR CNU-180B/E CONTAINERS WHEN THEY ARE LOADED WITH AN ITEM WHICH IS IDENTIFIED DIFFERENTLY BY NOMENCLATURE THAN THE ITEM DESIGNATED WITHIN THE DRAWING TITLE, PROVIDED THE GROSS WEIGHT OF THE CONTAINER DOES NOT EXCEED 2,500 POUNDS.
- E. THE LOAD AS SHOWN IS BASED ON A 6,050 POUND 20'-0" LONG BY 8'-0" WIDE BY 8'-6" HIGH SIDE OPENING CONTAINER INTERMODAL COMMERCIAL CONTAINER WITH INSIDE DIMENSIONS OF 19'-4" LONG BY 89-1/2" WIDE BY 86" HIGH. THE LOAD IS DESIGNED FOR TRAILER/CONTAINER-ON-FLAT-CAR (T/COFC) SHIPMENT, HOWEVER, THE LOAD AS DESIGNED CAN ALSO BE MOVED BY OTHER SURFACE MODES OF TRANSPORT. NOTICE: OTHER CONTAINERS OF THE SAME DESIGN CONFIGURATION CAN ALSO BE USED.
- F. WHEN LOADING THE CNU-126/E, CNU-180/E, OR CNU-180B/E CONTAINERS, THEY ARE TO BE POSITIONED TIGHTLY AGAINST THE CORNER ASSEMBLY AND THE CENTER FILL ASSEMBLY. LONGITUDINAL VOIDS WITHIN THE LOAD ARE TO BE HELD TO A MINIMUM, NOT EXCEEDING ONE-HALF INCHES (1/2"). ALTHOUGH A TOTAL OF ONE AND ONE-HALF INCHES (1-1/2") OF UNBLOCKED SPACE ACROSS THE WIDTH OF A LOAD IS PERMITTED, LATERAL VOIDS SHOULD ALSO BE HELD TO A MINIMUM. EXCESSIVE LONGITUDINAL VOIDS CAN BE ELIMINATED BY POSITIONING THE CONTAINERS TIGHTLY AGAINST THE CORNER ASSEMBLIES AND THE CENTER FILL ASSEMBLIES AND BY INSTALLING STRUTS TO FIT TIGHTLY BETWEEN THE CONTAINERS. EXCESSIVE LATERAL VOIDS CAN BE ELIMINATED FROM A LOAD BY ADJUSTING THE LENGTH OF THE SPACER PIECES IN THE CENTER FILL ASSEMBLIES OR BY LAMINATING ADDITIONAL PIECES OF APPROPRIATE THICKNESS TO THE BEARING PIECES OF THE CENTER FILL ASSEMBLIES. NAIL EACH ADDITIONAL PIECE W/1 APPROPRIATELY SIZED NAIL EVERY 12". ADDITIONALLY, THE THICKNESS OR QUANTITY OF DOORWAY FILL PIECES ON THE DOORWALL CENTER ASSEMBLIES MAY BE ADJUSTED (EITHER INCREASED OR DECREASED) AS REQUIRED TO ACCOUNT FOR ANY VARIANCE IN THE ACTUAL CONTAINER DIMENSIONS AND TO ENSURE THAT THE VOID BETWEEN THE LOAD AND THE DOORS IS MINIMIZED.
- G. WHEN INSTALLING THE CORNER BLOCKING ASSEMBLIES, THE ASSEMBLIES MUST BE POSITIONED SO AS TO BE SUPPORTED AND IN LINE WITH THE STRONG POINTS AT THE CORNERS OF THE CONTAINER ENDWALLS. NOTE: ADJUST QUANTITY AND/OR DIMENSIONS OF FILL PIECES TO BE INSTALLED ON THE END PIECES OF THE CORNER BLOCKING ASSEMBLIES IN ORDER TO PROVIDE A UNIFORM LOAD BEARING SURFACE AGAINST THE CORNERS OF THE CONTAINER ENDWALLS. NAIL THESE FILL PIECES TO THE PREVIOUS PIECE W/1 APPROPRIATELY SIZED NAIL EVERY 12" INCHES.
- H. DUNNAGE LUMBER SPECIFIED IS OF NOMINAL SIZE. FOR EXAMPLE, 2" X 4" MATERIAL IS ACTUALLY 1-1/2" THICK BY 3-1/2" WIDE AND 2" X 6" MATERIAL IS ACTUALLY 1-1/2" BY 5-1/2" WIDE.
- J. A STAGGERED NAILING PATTERN WILL BE USED WHENEVER POSSIBLE WHEN NAILS ARE DRIVEN INTO JOINTS OF DUNNAGE ASSEMBLIES OR WHEN LAMINATING DUNNAGE. ADDITIONALLY, THE NAILING PATTERN FOR AN UPPER PIECE OF LAMINATED DUNNAGE WILL BE ADJUSTED AS REQUIRED SO THAT A NAIL FOR THAT PIECE WILL NOT BE DRIVEN THROUGH ONTO OR RIGHT BESIDE A NAIL IN A LOWER PIECE.

(CONTINUED AT LEFT)

LOAD AS SHOWN

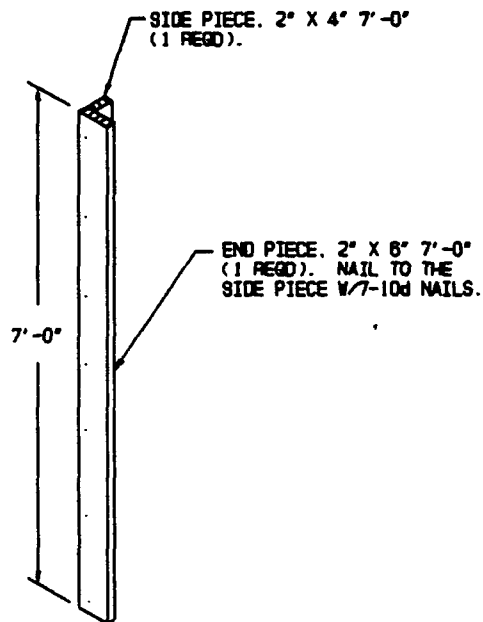
ITEM	QUANTITY	WEIGHT (APPROX)
CNU-180/E	12	25,008 LBS
DUNNAGE		472 LBS
SIDE OPENING CONTAINER		6,050 LBS
TOTAL WEIGHT		31,530 LBS (APPROX)

PAGE 3

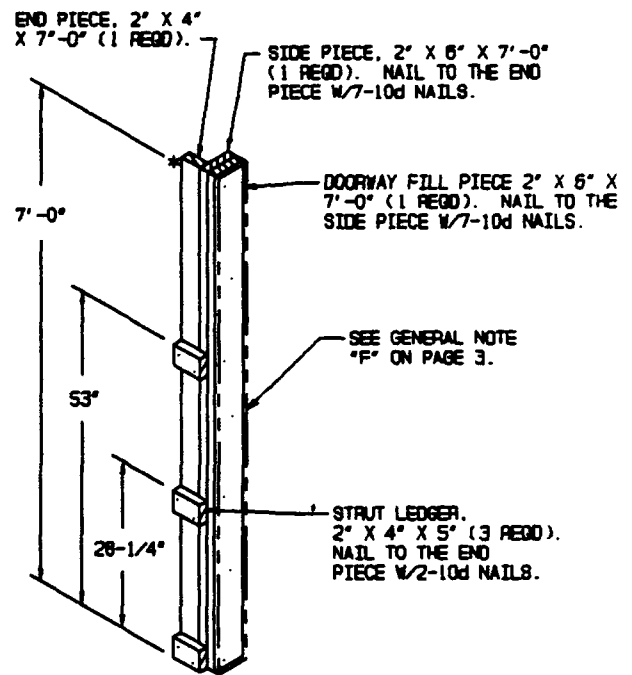


CENTER FILL ASSEMBLY

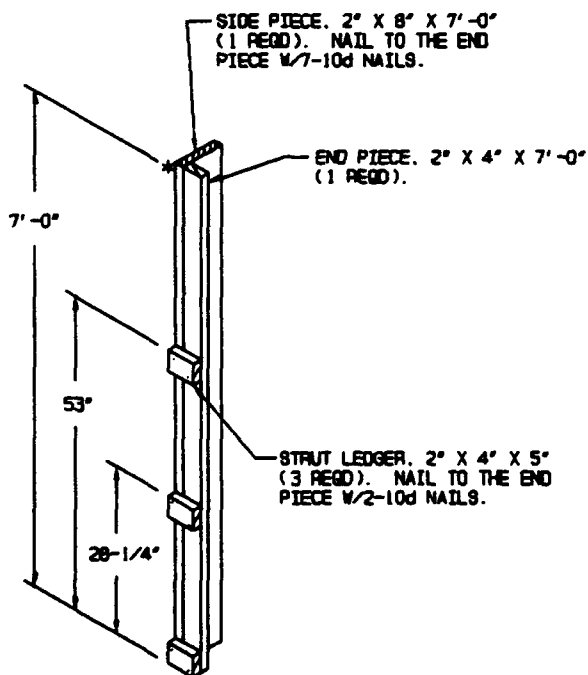
DETAIL



CORNER ASSEMBLY



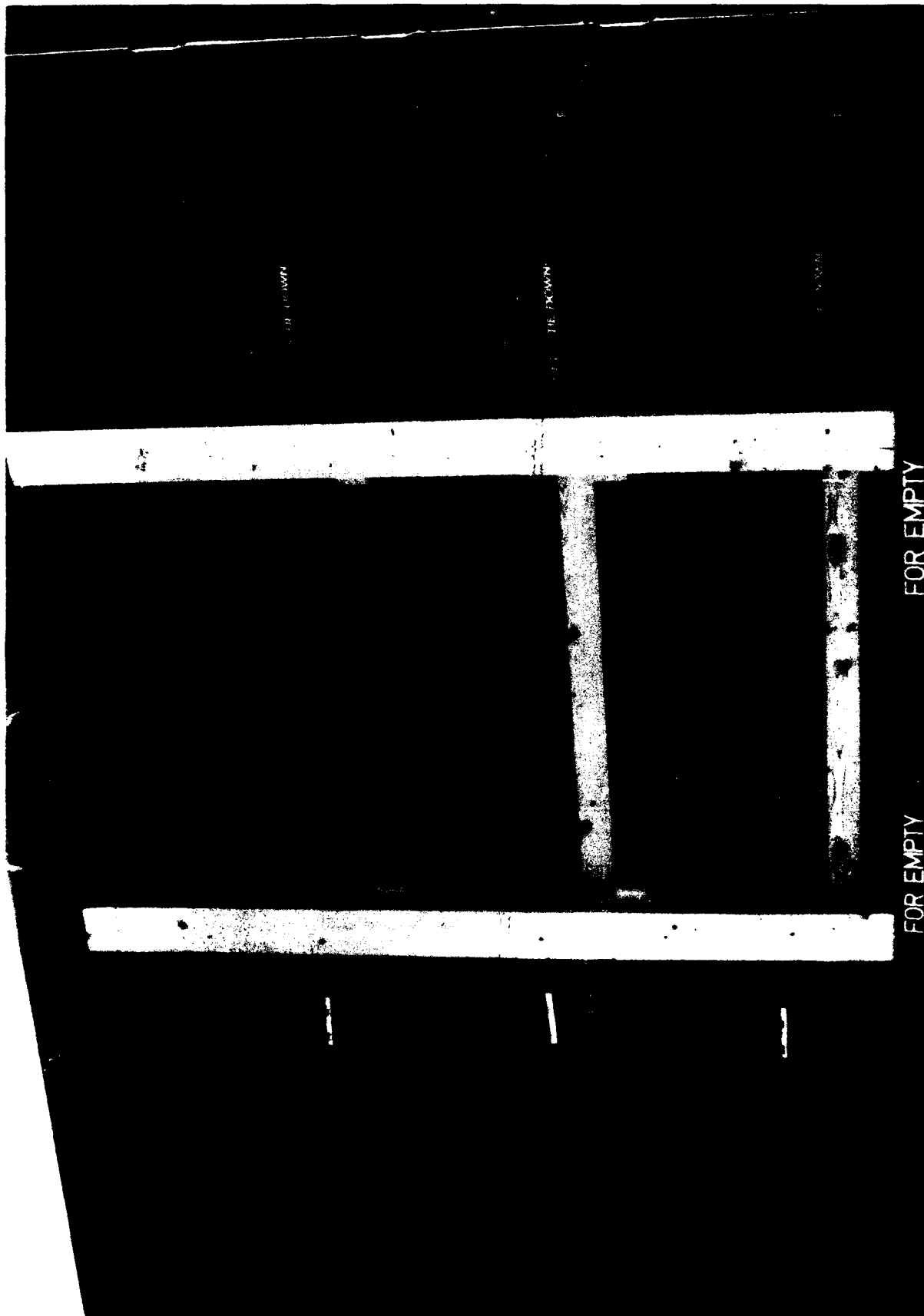
DOORWALL CENTER ASSEMBLY *



SIDEWALL CENTER ASSEMBLY *

* NOTE: ONE "RIGHT HAND" AND ONE "LEFT HAND" ASSEMBLY ARE REQUIRED.

PART 6
PHOTOGRAPHS



89-5324

DEFENSE AMMUNITION CENTER AND SCHOOL - SAVANNA, IL

FOR EMPTY

FOR EMPTY

Photo No. 1 This photo shows the CNU-180B/E containers loaded in a side-opening container. Note:
Dunnage lateral support strength depends on the container sidewalls at the rear and doors on the front.

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